Unlocking the potential of the younger older consumer: Consumer preferences and the assisted living market

Research findings from the COMODAL project
Foreword

The case for a consumer market for assisted living technology and services is getting stronger. Since the late 1980s, consecutive governments in the UK have supported the preference for people with health and social care needs to retain their independence and remain in their own homes for as long as possible. This preference is supported by the need for people to embrace self-management and control of their own healthcare both in terms of those with long term conditions and the wider well-being agenda. Assisted living technology (ALT) and services clearly have a key role in supporting these ambitions. Whilst the role for public sector service provision remains undiminished, there is no doubt that in the area of assisted living the consumer market will need to flourish, primarily to meet the levels of future demand which will otherwise overwhelm public services.

Older people are major users of health and social care services. As a consumer group, this market is largely untapped and yet is set to grow significantly as the population ages. This presents an enormous opportunity for those companies wishing to address the needs of people in later life, particularly the ALT industry.

COMODAL recognises the significant potential of older people as consumers and the current stasis in the consumer market for assisted living products and services aimed at such consumers. It supports the development of a market for assisted living products for younger older people; those people who are approaching retirement and older age in the 50 – 70 year age range.

Coventry University Health Design & Technology Institute, together with its partners Age UK and Grandparents Plus, believe that this important and pioneering study, which works directly with consumers and industry to determine new routes to market and mechanisms to sustain a consumer market for assisted living, will be an important component in increasing quality of life for older people as they ‘age in place’.

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## Acknowledgements

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For further information about the project, see Appendix One.

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Executive Summary

Successful ageing has been defined as ‘growing old with good health, strength and vitality’, optimising personal strengths and the resources available to enhance quality of life and adapt to change. This report provides a summary of the findings from a series of research activities undertaken in the first stage of a three year project known as COMODAL – Consumer MODEls for Assisted Living. COMODAL recognises the significant potential of older people as consumers and the current stasis in the consumer market for assisted living products and services aimed at such consumers. It supports the development of a market for assisted living products for younger older people, those people who are approaching retirement and older age in the 50 – 70 year age range.

Through better understanding of consumer barriers and behaviours, the report reveals key insights into consumer and industry behaviour in the current assisted living technology (ALT) marketplace and supports the premise that industry can better engage consumers with assistive technologies as an important resource that helps anyone to age successfully.

How assisted living technology users, consumers and potential consumers behave

The research suggests three distinct segments within the assisted living technology consumer market:

1. Prospective consumers – people who have yet to buy or use assisted living technologies
2. Consumers – people who already buy assisted living technologies either for themselves or for someone else
3. Non purchasing users – people who use assisted living technologies that they did not purchase themselves

Younger older people find the language and concepts of ‘assistive’ products or ‘equipment’ stigmatising and this is a barrier in their engagement with relevant products and services.

Recognising that assistive technology can be of help (i.e. that it can bridge the gap between changing ability and the everyday activities that people want to do) is a key stage in the process of obtaining it and making successful use of it.

Prospective consumers do not see the relevance of assisted living technologies to their lives and cannot imagine themselves using it.

Strong themes to come through in all stages of the research were:

- a lack of awareness of assisted living technologies
- a need for much more accessible and better information to empower people to make choices and decisions in terms of:
  - where to go to buy products and services and
  - what to buy

Consumers and prospective consumers particularly want:

- more opportunities for hands-on experience through demonstrations and “try before you buy”
- money back guarantees
- rental options and lease hire
- good design
- good customer service

The assisted living technology industry and the consumer interface

The research reveals that the ALT industry has a limited understanding of the needs of potential consumers of assistive products and services, and also of the potential and structure of a consumer led ALT marketplace.

There appears to have been an industry focus on equipment or technology to address the consumer’s disability, whereas a focus on solutions to fit in people’s homes and lifestyles and to meet and stimulate their aspirations might be what is needed.

Designers and product developers are just beginning to recognise the market of younger older people as consumers or potential consumers. There is still considerable opportunity for more imagination, creativity and innovation to make assistive technology attractive and desirable to potential consumers.

It appears that the market would be best served through better design of mainstream products, rather than specific items targeted at older people.

The telehealth and telecare consumer markets have particular potential for growth in comparison to other assisted living technologies. Consumer awareness of these types of products and services is especially low.
Introduction

There are well over 21 million people aged over 50 years in the UK, a third of the total population and, for the first time in history, there are now over 14 million people in the UK aged 60 and above. It is estimated that by 2083, about one in three people in the UK will be over 60.

Ageing is, of course, associated with the onset of conditions which impact on health and abilities in terms of mobility, grip strength, mental capacity, etc. Nevertheless, there is wide diversity among people as they age and many remain fit, active and healthy well into older age. Equally, people in their fifties and sixties can start to see the effects of ageing, for example approximately 30% report at least one long term illness that limits their daily activities in some way.

Successful ageing has been defined as ‘growing old with good health, strength and vitality’. Psychological theories focus on ‘optimisation’ and the discovery of strengths that enhance quality of life. Assistive technologies can aid the optimisation process by providing the right equipment or environments that enable the person to continue living the life they have lived to date and also explore new activities and developments.

It is now widely accepted that Information and Communication Technology (ICT) applications can provide new ways to help older people to live independently. The uptake and use of these products is, however, far from extensive or sustained. Both uptake and use are likely to be influenced by a variety of factors, including design factors and usability, individual attitudes such as perceptions of need for and effectiveness of such products, fears surrounding use of them, and societal attitudes towards assisted living technologies alongside changes in health and social care provision.

This report reveals key insights into consumer and industry behaviour in the current ALT market place and supports the premise that industry can better engage consumers with assistive technologies as an important resource that helps anyone to age successfully by better understanding consumer barriers and behaviour.

Summary of previous research

Use and effectiveness of assistive living technologies

Most of the previous research on the use of assistive technology focuses on older, frailer users rather than younger older people. All the research points to the fact that in order for technology to be used, it needs to be perceived as relevant to the everyday lives of older people.

Recognising that assistive technology can be of help (i.e. that it can bridge the gap between changing ability and the everyday activities that people want to do) is a key stage in the process of obtaining it and making successful use of it. As a general rule, people want to manage for themselves, regardless of whether they live alone or with others. Following this, the quality of the product or service itself becomes key, and efficiency, reliability, simplicity and safety are important factors.

Some research shows that accepting a need for assisted living products is more likely following an event such as being diagnosed with an illness or an accident, for example a fall. Such events increase feelings of vulnerability, loss of control or possibly dependence on others. One response might be to take control and make any necessary changes, including obtaining assistive technologies. A different response, however, might be to rationalise risk away, or to downplay it and ignore the situation. For example, some older people think of falling as unpredictable, unpreventable and beyond their control, or something that would happen sometime in the future, or to somebody else. Research, albeit on older, frailer people, suggests that healthcare professionals are focusing on different things compared to the users or consumers of assistive living products. Whereas professionals focus on risk, users focus on self-image and maintaining a certain lifestyle.

Unsurprisingly, our attitudes and ways of adjusting to ageing affect our personal motivations and preferences, which may in turn affect recognition of the advantages versus the disadvantages of assistive technology. This is in line with the psychological theories of successful ageing which emphasise the person’s ability to re-evaluate themselves and their lives, and adjust to change while still maintaining their self esteem.

1 Age UK (2012) Later Life in the United Kingdom
3 Age UK (unpublished) secondary data analysis of English Longitudinal Study of Ageing Wave 1
As well as psychological factors, other issues are relevant in the use or non-use of assistive living technology and the research can be summarised into the following categories:

- User or consumer-related factors – these include age, gender, diagnosis, physical and psychological function, education level, socio economic group, values, goals and preferences, culture, perceived needs, living arrangements, goals of the caregiver and family, psychological readiness, and a change in physical state
- Technology related factors – aesthetic appeal, comfort, cost, reliability, durability, ease of use and effectiveness in meeting a need
- Environment related factors – the type of home the user lives in, outdoor places or other environments such as workplaces, where assistive products might be used
- Training related factors – how well the user, carer or family is trained or prepared in using the assistive technology

Telehealth and telecare devices and services were highlighted as particularly problematic for consumers. Public understanding and awareness of these products is very low and so the potential benefits to users are missed. Low consumer demand can mean that the market fails to develop products that are based on careful analysis of perceived and actual needs, or how these needs change over time. These products are mainly targeted at older, frailer users at present and as such will often be bought by younger relatives or carers. Previous research showed that informed consent from the user is essential and there was also some concern among users that this kind of ‘monitoring’ equipment would mean fewer visits from carers or family and them feeling isolated. User confidence is also essential and reliability and good maintenance and servicing are crucial. It was suggested that buyers would be helped by opportunities for more hands-on experience through demonstrations, ‘try before you buy’, hearing about other customers’ experiences and better information provision.

Summary of barriers to the market for older consumers of assistive living technology

When making a purchase, consumers go through a number of states which include: feeling a need or desire for a product or service; taking steps to make the purchase through retailers or manufacturers; choosing between different options; buying the product and then finally using the product. While putting forward these stages, it is not assumed that the process is a rational, sequential one in all (or even in most) cases. The barriers emerging from the literature grouped themselves loosely into these stages, and are presented in the categories below.

1. Feeling a need or a desire / triggers to purchase
   - Consumers do not perceive a need for assistive living products or services
   - Consumers lack information or awareness of such products, services or solutions
   - There is stigma associated with assistive living technologies, which comes from negative attitudes towards ageing, dependence or frailty
   - There are differences in cultural views about the acceptability of assistive living products and services

2. Taking action / routes to purchase
   - Lack of information or awareness on how or where to purchase
   - Lack of help in choosing the best product or service to meet the need and be cost-effective
   - Associating ‘needs assessment’ with purchase of assistive living products or services, and not wanting to undergo assessment
   - Lack of information about ways of paying for products or services through local authority funding (e.g. personal budgets)

3. Choosing between options / design issues
   - The complexity of some products, which are not designed for typical user needs and preferences
   - Technical issues that affect performance or reliability
   - Lack of confidence or trust in the technology
   - Lack of regulatory standards
   - Concerns that some products or services share personal data (e.g. with health services)
   - Concerns about privacy and control of certain health monitoring services
   - Poor aesthetics
   - A ‘disconnect’ between designers and the consumers of the products or services
4. Using the product / customer service

- Limited knowledge and training in how to use assistive living technology, coupled with the complexity of some devices
- Lack of confidence in risk management, both at an individual and a service level
- Worries about maintenance, accountability and after sales service if the technology fails

Consumerism, the retail model and statutory versus private purchase

Over the past fifteen years there has been slow, halting change towards a retail model of purchase of assistive living products in England, which has been concurrent with fundamental changes in the funding of social care. Since 1997, various user groups have been able to receive ‘direct payments’ in lieu of services, which they could use as they saw fit, to pay for their care. Direct payments are now available in the form of a ‘personal budget’, which is an amount of funding based on the assessed needs of the person. This budget can, of course, be used to pay for assistive technology.

In 2001, the Department of Health\(^5\) published the ‘Guide to Integrating Community Equipment Services’ recommending that provision of assistive technology was integrated between health and social care to provide a less disjointed service to users. Lack of integration is highlighted by many as a key barrier to effectiveness throughout the statutory sector. However, a report in 2008 found users received little benefit from the new approach with people not accessing the ‘community equipment’ that might be of use\(^6\). A subsequent initiative, ‘Transforming Community Equipment Services’, gave prescriptions to users for ‘simple’ items, allowing some choice from a range of products (of similar specification) and the ability to ‘top up’ their personal budget for alternative items, to increase user choice and control. In 2008, the retail model was rolled out across England, however only a limited number of local authorities have adopted it.

The government clearly thought that this model would improve consumer access to assistive living products and services;

‘The retail model recognises the need for improved information, the normalisation of and availability of community equipment in the high street to provide universal service delivery for all.’ \(^5\)

A range of issues are relevant to this ‘halfway’ retail model of supply. Firstly, as the DH quote states, being able to make purchases in the high street normalises the provision of assistive living products and reduces stigma\(^7\). It was found that this was the case for many service users who liked being able to ‘buy products in a shop in the ordinary way’.

There may also be age differences in whether people prefer to be supplied with products by care services or whether they prefer to choose their own. Research finds that younger people have higher expectations, are more comfortable within a consumer environment, and are more likely to accept direct payments.

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Trust in the information or advice given is also important. Some people have faith that a care professional such as an occupational therapist would know the ‘best’ solution for them. Much of this may arise from the ‘medical’ model approach towards ageing and disability, where attitudes towards assistive living products and services are different to other products and consumers (or ‘service users’) look to others to know what is best. Consumers may lack trust in private retailers’ independence and there are anecdotal reports of negative experiences, such as people being sold unsuitable products. Charities report concern that retailers, under pressure to increase profits, may pressurise users to top up their prescriptions. For high street suppliers of assistive living products, it seems that retailer accreditation may be important to ensure that ‘individuals don’t have advantage taken of them’.

The retail market is potentially very large compared to the statutory market and it is clearly yet to be fully tapped into. In 2008, local authority expenditure on assistive living products was approximately £177 million, compared to some £244 million spent by private purchasers. Aspects of private supply need to be considered carefully, such as the broad range of equipment versus the ability for retail outlets to offer comprehensive choice and changes in logistics which see manufacturers moving from their current block supply contracts, making large deliveries to a small number of locations towards much smaller deliveries to a much larger number of locations.

The private spend, however, is highly likely to increase and the public spend to decrease in the current economic climate and beyond, as demographic change means more and more people become consumers of assistive living technologies.

Design of assistive products and services

Well designed assistive products and services can have positive impacts on how older people may age successfully, although contemporary designs and technologies are not always enthusiastically received by this consumer group.

A key barrier to good design may be that designers are disconnected from end users, the types of problems they have and the environments they live in. Coupled with this, end users can often be unfamiliar with the opportunities offered by new technologies. In these cases they are unlikely to be able to express their needs or look beyond the current situation. Designers need to understand functionality, value, design, cost, privacy, trust and acceptance of all users. The meaning and desirability of a product is also very important; consider the difference between having the newest tablet or mobile phone (which can be used as an assistive product), of which an owner may be proud, and having a personal alarm or telecare equipment in the home, which may have a completely different meaning to the user.

The review identified a number of different approaches to design and development of assistive living products including universal design, inclusive design and ‘design for all’. As an example, Universal Design is founded on seven principles:

1. Equitable use – the design is useful and marketable to a wide range of people
2. Flexibility in use – it allows for a wide range of preferences and abilities
3. Simple and intuitive use – it is easy to understand and does not require special knowledge or expertise
4. Perceptible information – it communicates the information needed to the user, regardless of the conditions or the user’s abilities
5. Tolerance for error – it minimises hazards and the consequences of accidental misuse
6. Low physical effort – it can be used efficiently and comfortably with minimum fatigue
7. Size and space for approach and use – appropriate space is designed to approach, reach, manipulate and use the design regardless of the user’s body size, posture or mobility.

Whereas these products can bridge the important gap between users and designers, there are questions about the feasibility of their use in the business world. For example, Universal Design is considered expensive, impractical and difficult to implement, and guidelines and standards are not presented in a usable form. Further development of these approaches could go a long way towards producing better solutions for consumers.

Market analysis

A market analysis was carried out as part of the COMODAL project to categorise available products, identify the main suppliers and summarise their propositions, including economy, standard or premium products, routes to market through direct, third party or business-to-business routes, and access to professional advice. Some parts of the market were clearly dominated by three main suppliers. All the leading manufacturers sold their products to a wide range of outlets with wide price variations as a consequence, indicating that, for the consumer, it was well worth shopping around.

In defining the market it is difficult to draw clear boundaries around those products that would normally be supplied by health or social care services and those that consumers might wish to, or be expected to, buy for themselves. There are other grey areas, for example where a specialist product may have become mainstream and be available through ordinary retail outlets. This can lead to confusion over who should provide the product, and whether VAT is payable (VAT depends on the characteristics of the consumer and on the type of product).

From a previous survey of 3000 actual or potential consumers, the three top triggers leading to purchase were: professional recommendation (22%); recommendation by a friend or family member (17%) or the onset of a health condition or change related to ageing (16%). The top five categories of daily living difficulties were: getting out and about (23%); household chores (18%); DIY and gardening (11%); getting up and ready for the day (9%) and preparing and cooking food (8%). However the most common response to a problem with daily living was to; ‘just keep going’ or ‘struggle on’ (35%). Relatively smaller proportions of this group would ‘buy a product’ or ‘seek practical help in the home’. Given that the whole sample of the survey were relatively more likely than the general population to consider buying a product, the finding shows that there is a lack of perceived need for assistive products and services in this consumer group.

Of particular note was the absence of specific, separately identifiable, retail self funded markets for electronic assistive technology, telecare or telehealth. The vast majority of telecare or telehealth equipment is currently supplied by local authorities or the NHS.

The survey of consumers showed that the main suppliers of assistive technology used are local specialist mobility shops (40%) and local independent high street retailers (36%). Some 7% of consumers had ordered over the internet, 6% by mail order and 6% had bought from pharmacies.

This review showed that the assistive living technology market is yet to become fully mainstream. Certain aspects, such as low levels of public awareness, high needs for expert advice and complications regarding VAT, make it stand out from other markets. However, there are some examples where inclusive design has resulted in specialist products that have become mainstream because they have features that are useful and attractive to all users. One well known example is the Oxo range of ‘Good Grips’ kitchen utensils. With the decrease in the public purse and accompanying diminishing role of the state, the process through which assistive products become a feature of more mainstream outlets is under way.

Other major drivers include:
- Interest among national retailers, particularly pharmacy chains
- Growing recognition among some mainstream manufacturers that their customer base is ageing
- Saturation of other mainstream consumer product categories
- Growing awareness of assistive living products among carers and younger older people
- Lower barriers to entry in the market place, e.g. lower cost retail sites
- Changing attitudes in society towards individualism, self-help and self-provision
- Wider recognition of the opportunities and challenges of an ageing population

12 Years Ahead report: consumers aged 40 and over who identified themselves as having a daily living difficulty or being a carer, and having purchased an assistive living product or being willing to consider doing so in future.
Product Review

The product review looked at trends in development, types of products currently being developed, and how well they meet the needs of consumers in their fifties and sixties. It showed that designers and developers are only now beginning to recognise the market of younger older people as consumers or potential consumers.

The review found that the market would be best served through better design of mainstream products, rather than specific items targeted at older people. It is clear that younger older people do not want to be stigmatised or singled out as in need of ‘assistive’ products or ‘equipment’. Where such products have been developed, they have tended to focus on the disability rather than the person who will use them, their wishes and aspirations and unsurprisingly this makes the products less attractive and desirable. It might also make them less functional as addressing just one disability may mean failure to recognise other needs.

The review highlights nine gaps in the design of assisted living products:

1. Control – many of the new assistive technology products take control away from the user.
2. Products which meet consumers’ wishes, desires and aspirations – rather than simply focusing on basic functional design.
3. Quality of customer service, including after sales service – this might be particularly valued by people in later life.
4. Adherence to standards is weak – many products do not have ISO or CEN authentication.
5. Discretion and privacy – younger older consumers do not want products that characterise them as disabled or in need of assistance.
6. Pleasure and experimental design – very few products take into account the whole experience for the user, such as the attractiveness of the design, the meaning of using the product, and the feelings that arise when using the product.
7. Catering for a range of needs or disabilities and being adaptable to changing needs – too many products are designed for a specific disability rather than for the whole person and not enough are adaptable.
8. Fitting into peoples’ homes – many products recommended by occupational therapists are rejected by people because they ‘did not want their homes looking like hospital clinics’.
9. Economic feasibility – this includes having regard for the affordability of the product to its target market, built-in obsolescence (considering the speed of technological development) and the fact that products do not emerge from a clear understanding of needs.

Consumer Street Survey

The terms barriers and enablers are used to describe the factors that would either discourage or encourage purchase and subsequent use of assisted living products and services.

To help understand the importance of the different barriers and enablers affecting the purchase and use of ALTs by younger older people, 500 street interviews were undertaken in five representative locations across the UK, including Scotland and Wales. Consumers were asked to rank the importance and influence of the barriers and enablers to purchase and use of ALT products and services and were also asked about some of the wider factors that affect decision making about what product to buy and the purchase process.

The results of this quantitative research highlight how the consumer market has been held back by the dominance of the statutory provision of ALTs through health and social care services. This has clearly led to the development of what might be described as ‘anti-mainstream’ features – functional products/services that are only available in off-the-beaten-track locations, with the consumer unaware of what is available and lacking the knowledge to make an informed purchase.

The top three barriers that were ranked as having the strongest influence for the 50-70 age group were: cost; knowing how to choose what to buy; and a lack of awareness that a product that might help exists. The top three enablers were: belief that a product would really make a difference; a feeling that costs are affordable and worth it; and a belief that the product would make life safer at home.

The data suggests there are differing perceptions and responses between experienced, new and prospective consumers. From this survey, three main consumer groups appear to be emerging within the ALT market place:

1. People who have yet to buy or use ALTs (prospective consumers) but who need to be informed
2. People who already buy ALTs either for themselves or for someone else they look after (consumers)
3. People who use ALTs but have not purchased them themselves (non purchasing consumer)

Younger carers who were also included in the survey appeared more sensitive to issues such as how the person they care for feels about using ALTs and their quality of life and this sensitivity within the purchase decision needs to be considered by both designers and retailers in terms of the look or feel of a product.
In terms of buying a product or service to help, this survey shows a change in direction from previous research with buying a product listed as the top way of dealing with a daily living difficulty, by 54% of respondents. However, more than a quarter (28%) of people referred to simply struggling on, particularly prospective consumers who had not bought or used assistive technology yet. This indicates the importance of raising awareness that ALTs exist and may be able to help to this group in particular.

Differences were also found between different social economic groups (SEG)13 in their approach to the purchase of assisted living products. AB consumers are much more likely to listen to healthcare professionals for advice than any other SEG. Shopping via the internet was more important for consumers in AB and CI groups than for C2 and DE consumers. However, friends and family are more important influences on the purchase decision than the internet for C2 and DE consumers. These trends are important for market segmentation and provide useful insights for industry in terms of how they promote their products.

Results highlighted that even when consumers are purchasing products they are doing so with a shortage of knowledge and not knowing where to seek advice. Second to family members, who may or may not be well informed about ALT, healthcare practitioners are still perceived as the most important source for advice. In this respect, it is similar to the daily living product market of 5-10 years ago, but there is a greater degree of complexity involved with electronic ALT – both in the problems experienced and the technological solutions for them. The indications of cautious behaviour and attitudes shown by inexperienced consumers and carers in this survey may be significant for the future development of this emerging sector of the market. Undoubtedly, the role of healthcare professionals is also changing and, whilst they are likely to remain an important influence and gatekeeper, their future role, particularly at the less complex end of the product/service spectrum is likely to diminish as the market place changes and becomes more mainstream. Who or what type of service will provide this information to consumers is, however, unclear.

If ALT overall can be described as a market emerging into the mainstream, then, within it, electronic ALT can be described as being in its infancy; few people within this survey had purchased electronic ALT and even fewer telecare or telehealth products (8%). However, with the popularity and acceptance of technology amongst many younger older people, telecare and telehealth are perhaps set for even greater growth than other ALT.

13 The socio-economic groups (SEG) used in this survey were based upon the definitions published by the Market Research Society, Occupation Groupings: A Job Dictionary, 6th ed. 2006, with those in group A being defined as professional people, very senior managers in business or commerce or top-level civil servants and group E defined as those entirely dependent on the state long-term, through sickness, unemployment, old age or other reasons, unemployed, casual workers and those without a regular income.

### Consumer Focus Groups

To explore the barriers and enablers using a more deliberative, in-depth approach to gain a better understanding and create a rich picture of attitudes towards the purchase and use of ALTs, four focus groups were carried out in various locations across the UK including London, Coventry, Gateshead and Leeds. Participants in each focus group were from one particular younger older people consumer type:

1. **Personal Consumer** buy and use ALTs
2. **Prospective Consumer** don’t buy and don’t use ALTs
3. **Carer Consumer** buy but don’t use ALTs
4. **Non-Purchasing User / Consumer** use but don’t buy ALTs

People who took part in the focus groups were presented with pictures of various assistive technologies (AT) to explore their awareness of existing AT and to stimulate discussion. The data were analysed to reveal the underlying themes across groups, the themes arising regarding their initial thoughts and perceptions were:

- Awareness of products
- Design – aesthetics
- Design – function
- Stigma
- Electronic Assistive Technology
- Cost

Overall, there was a lack of knowledge and awareness regarding assistive technology. Participants also felt there was a lack of information available which was a significant barrier to purchasing such products. Many products were considered stigmatising, and products did not always meet functional needs. People were concerned about the quality of unknown products, and whether they would be getting value for money.

“**It’s quite difficult isn’t it, you know, we’re thinking, well it’s difficult for me to think of where to purchase such products.**”

(Prospective Consumer)

However, despite these barriers, a number of enablers to the purchase process were identified. Participants felt that rental or “try before you buy” options improved people’s confidence in choosing the right product for them. Participants were pleased with a number of AT products, and felt that increasing the information available on these products and spreading the positive messages of assistive technology would be a good way to enable people to purchase.
The normalisation of assistive technology was seen as an important enabler to purchasing. Participants across the groups felt that with an ageing population, the use of certain products (e.g., mobility scooters) would become more acceptable. However, participants were also keen to point out that such products are not just for older people, they can be helpful for people of all ages. This mainstreaming of assistive technology was thought to be an enabler because more people would be using the products (thereby improving acceptability in the public eye), and economies of scale would reduce the cost of daily living aids. Positive images of those using assistive technology was also seen as an enabler and the affirmative portrayal of disabled and older people in soap operas was important.

There was much agreement between the groups regarding many of the enablers and barriers; however there were also some distinct differences between each of the purchasing groups of younger old people. The Prospective Consumers talked about AT being relevant for their parents, and were the least aware that AT products could be used for younger people. They saw AT as ‘something my parents use’, and spoke of how AT wouldn’t be relevant to them personally for at least another 15 to 20 years. They were also the group most influenced by stigma of ALTs. They felt that many assistive products are associated negatively with ageing, with zimmer frames and shopping trolleys being discussed as particularly stigmatising. However, it was recognised that personality would determine whether the stigma associated with such products would affect use, with some people “not caring” about other people’s perceptions. It was also felt that there was a decision to be made between stigma and independence, where if the level of need for a product was such that it was threatening a person’s independence, then the stigma associated with the product would not matter as much.

The Personal Consumers felt that there are many people who have a low awareness of AT, and they felt lucky that they were part of good social networks which enabled them to find out about AT for their own use. Generally, those with good social networks had a higher level of awareness of assistive technology.

The Carer Consumers had the most to say regarding the limitations and functionality of AT, as they have seen those they care for struggle to use various products. They were also very aware of the cost of AT, and felt that with a growing market, AT would become cheaper in the future. The Carers were very similar to the Personal Consumers in that they were very aware of the power of social networks and networking to raise the awareness of AT.

There was a polarity of views regarding Electronic Assistive Technology (EAT), with views ranging from “terrifying” to “fantastic”. This feeling was evident across the four younger older people groups. There was some previous awareness of blood pressure monitors, fall detectors and products aimed at those with memory loss or dementia. The awareness of such products generally came from seeing them in supermarkets and pharmacies. Participants felt that EAT has the potential to be very good if supported with education and information. However, there was also concern that EAT was too complicated, and there were concerns about accuracy, increasing anxiety, ease of use and reduction in social contact.

The Non-Purchasing Users were the only group to think that AT should be provided by statutory services. This is possibly because the majority of participants had been supplied their AT by their Local Authority, and had relatively little experience and awareness of purchasing privately.
The Personal Consumers and the Carers group were the most similar in terms of their views based upon their personal purchase experience, this lends weight to the proposal of three distinct populations within the ALT consumer market that consumer led business models need to consider:

1. People who have yet to buy or use ALT (Prospective Consumers) but who need to be informed
2. People who already buy ALTs either for themselves or for someone else they look after (Consumers)
3. People who use ALTs but have not purchased them themselves (Non-Purchasing User/Consumers)

In summary, the focus groups demonstrated that, generally, people are not aware of ALT products and services that might help them. Even if they are, they do not know where to go to buy them or how to choose the right product or service that best meets their needs.

Profile of the Purchasing Behaviours of Younger Older People

The following tables (1-4) represent a synthesis of the differing views and purchasing characteristics of each of the four younger older people groups collated from the street survey and focus group data. Table 5 illustrates the Carers group aged 30-44 or 71+.

Table 1 Personal Consumer (Buy and use ALTs)

<table>
<thead>
<tr>
<th>Characteristics - Personal Consumer (50-70 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting out and about most common daily living difficulty</td>
</tr>
<tr>
<td>More likely to use a mobility shop/specialist outlet</td>
</tr>
<tr>
<td>Least likely to use approach local council for advice</td>
</tr>
<tr>
<td>No one else involved in purchase decision</td>
</tr>
<tr>
<td>Pleased with function of products bought</td>
</tr>
<tr>
<td>Access to good information/social networks</td>
</tr>
<tr>
<td>Access to improved information for others considered important enabler</td>
</tr>
<tr>
<td>Keen to see new models of purchase</td>
</tr>
</tbody>
</table>

Table 2 Prospective Consumer (Don’t buy and don’t use ALTs)

<table>
<thead>
<tr>
<th>Characteristics - Prospective Consumer (50-70 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More likely to struggle on rather than find a solution to daily living difficulty</td>
</tr>
<tr>
<td>Lack of perceived need</td>
</tr>
<tr>
<td>Lack of awareness of products</td>
</tr>
<tr>
<td>Perception that products were for people older than themselves</td>
</tr>
<tr>
<td>Influenced by the complexity and feeling that products are not easy to use</td>
</tr>
<tr>
<td>Most concerned about the stigma of using ALTs - negative association with ageing</td>
</tr>
<tr>
<td>Good design considered important</td>
</tr>
<tr>
<td>Don’t know where to buy ALTs</td>
</tr>
<tr>
<td>Greater emphasis on getting professional advice</td>
</tr>
<tr>
<td>Lower prices less important</td>
</tr>
<tr>
<td>Keen to see a variety of new models of purchase for ALTs</td>
</tr>
</tbody>
</table>
Table 3 Carer Consumer (Buy and but don’t use ALTs)

<table>
<thead>
<tr>
<th>Characteristics - Carer Consumer (50-70 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting around the home safely cited as most common daily living difficulty for person they care for</td>
</tr>
<tr>
<td>No one else involved in purchase decision</td>
</tr>
<tr>
<td>Good design considered important</td>
</tr>
<tr>
<td>Most aware of EAT, telecare and telehealth</td>
</tr>
<tr>
<td>Access to good information/social networks</td>
</tr>
<tr>
<td>Access to Improved information for others considered important enabler</td>
</tr>
<tr>
<td>Highlighted cultural differences in the purchase of ALTs</td>
</tr>
<tr>
<td>Keen on rental model for ALTs</td>
</tr>
</tbody>
</table>

Table 4 Non-Purchasing User/Consumer (Use but don’t buy ALTs)

<table>
<thead>
<tr>
<th>Characteristics – Non-Purchasing User/Consumer (50-70 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardest group to reach, not out and about as much</td>
</tr>
<tr>
<td>DIY and Gardening more difficult</td>
</tr>
<tr>
<td>Home adaptations most common</td>
</tr>
<tr>
<td>Knowledge of products through statutory services</td>
</tr>
<tr>
<td>Most pleased with function of products</td>
</tr>
<tr>
<td>Feeling confident about deciding which product is right seen as stronger enabler than other groups</td>
</tr>
<tr>
<td>Most likely to use approach local council/NHS for advice</td>
</tr>
<tr>
<td>Don’t know where to buy ALTs</td>
</tr>
<tr>
<td>Least likely to use a mobility shop/specialist outlet</td>
</tr>
<tr>
<td>Negative purchase experiences for ALTs</td>
</tr>
<tr>
<td>Lack of access to good information/social networks</td>
</tr>
<tr>
<td>Likely to involve a healthcare professional in purchase decision</td>
</tr>
<tr>
<td>Strong desire to involve anyone they may care for in purchase decision</td>
</tr>
<tr>
<td>Despite lack of retail experience had strong views on what was important</td>
</tr>
<tr>
<td>Lower prices more important</td>
</tr>
<tr>
<td>Only group to believe that the state should provide ALTs</td>
</tr>
<tr>
<td>Keen to see a variety of new models of purchase for ALTs</td>
</tr>
</tbody>
</table>

Table 5 Carers (30-44 or 71+ years - Consumer Survey data only)

<table>
<thead>
<tr>
<th>Characteristics - Carers (30-44 or 71+ years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger Carers More concerned about enjoyment and quality of life of person they care for</td>
</tr>
<tr>
<td>Younger Carers more likely to use the internet for information</td>
</tr>
<tr>
<td>Less likely to buy a product to help</td>
</tr>
<tr>
<td>Most sensitive to how using a product may make their loved one feel</td>
</tr>
<tr>
<td>Influenced by the complexity and feeling that products are not easy to use</td>
</tr>
<tr>
<td>Greater emphasis on getting professional advice</td>
</tr>
<tr>
<td>Likely to involve a healthcare professional in purchase decision</td>
</tr>
<tr>
<td>Strong desire to involve anyone they may care for in purchase decision</td>
</tr>
</tbody>
</table>

The Personal Consumer group who are buying for themselves are the most informed and confident buyers, already making choices and decisions but they are still keen to see new models of purchase such as “try before you buy”, money back guarantees and rental options.

The Prospective Consumers who are yet to purchase, are the group with the greatest lack of perceived need and awareness of ALTs. This group will need considerable marketing and information. Influences such as stigma associated products and negative attitudes may be balanced by good design and desirable products.

The Carer Consumers are similar to the Personal Consumers in that they are informed and make use of social networks for advice and knowledge about products that work. Both these groups however recognise that this is not true for everyone and see the need to expand awareness and information for all alongside new ways of buying ALTs.

The Non-Purchasing Users have less experience of a retail market and their knowledge has been largely shaped through statutory provision of ALTs. However, despite not knowing where to go to for products and their lack of retail experience, they have strong views on what is important and are also keen to see new models of purchase alongside state provision.

The other consumer group considered in this project, those carers aged 30-44 or 71+, are an interesting group in that they appear to be cautious purchasers. Although they may use the internet for information, they lack confidence to buy preferring to get advice from health care professionals. They are concerned about quality of life, enjoyment, leisure activities and how their loved one may feel about using a product which is a largely untapped part of the ALT market.
**Industry Perspectives**

Consumers are only one part of the picture in the retail market for assisted living technologies. Industry partners, retailers and manufacturers need to know how to engage in this emerging market to reach the consumers. In order to inform this research, ten companies in the assisted living industry, including large technology and service suppliers as well as small and medium-sized enterprises (SME) gave their views about the state of the assisted living technology market. A workshop discussion, interviews and a questionnaire were used to gather their perceptions, understanding and experience of barriers to the use of their assisted living products and services for younger older people. It was clear from the information collected that this is a complex matter.

Industry views highlighted a broad spectrum of perceived barriers relating to:

1. Considerable lack of awareness of the existence, choice and benefits of ALTs amongst the public, and amongst statutory and private sector health and social care providers.
2. Historic organisational structures and cultures within statutory service providers, including a reluctance to take risks, resulting in a very high expectation of proof of the health and business benefits of ALTs.
3. Insufficient incentives for the public and providers to invest time and money into ALT products and services, including the problems of negative incentives, silo budgets and short-term funding.
4. Poor definition and understanding of the needs of potential individual consumers and also of the potential and structure of the ALT marketplace.
5. A need for market-changing products and a focus on solutions and services, not just on technologies.
6. A need for better design of ALTs to make them attractive, functional, discreet, simple and easy to use.
7. The lack of integration of ALTs into everyday environments, activities, services and technologies.
8. Insufficient focus on the strengths of ALTs and on the opportunities provided by them, especially in the areas of prevention, enabling carers, and helping individuals to be connected with the community at large.

The questionnaire asked companies to rank the barriers in a similar format to that used in the consumer survey to purchasing and using ALT products and services. It was clear from this that they thought a lack of awareness of ALTs is the major market barrier.

This was also noted during the workshop; the look or design of ALT products and services was also seen as a significant barrier, while complexity, difficulty of use and the power of negative thoughts of other people about the use of ALTs were viewed as being influential.

Initial purchase cost and personal privacy were regarded as potential barriers, but opinion was more divided over ongoing costs, reliability and the lack of standards or regulation.

Negative perceptions of the design, usability, acceptability and necessity of ALTs were also thought to contribute to poor uptake, along with poor user accessibility to both products and services.

Overall, there was strong consensus within the Industry group that lack of awareness is a major barrier to the uptake of ALTs. Awareness-raising around the existence, need for, and benefits of ALTs must become an important area of activity for Industry and assisting Industry with this should be a priority focus area for the COMODAL project.

Key questions to address with potential ALT purchasers could be: what media they regularly use in their everyday lives which could be used by Industry to distribute information and promote ALT products and services; in what areas of their lives they might be likely to want to use technology if it were available; what sort of information they would find useful to help them choose between ALTs.

Assisting industry in understanding users’ views on where and how ALT services and everyday services should interface in order to meet their needs and help them feel connected to their community is also a potential area for development.

Another area in which Industry may be helped to address barriers is in demonstrating the business case for and economic benefits of ALTs.
**Key Findings**

This study focuses specifically on uncovering the preferences and behaviours of younger older people relating to the assisted living sector. Overall, it was found that a great deal was known about the barriers and enablers to the traditional ALT market for consumers who wanted to make a purchase (i.e. without involving health or social services), but that not much was specifically related to younger older people.

The barriers and enablers that related to a consumer market were grouped into four categories:

1. Feeling a need or a desire to make a purchase
2. Taking action / routes to purchase
3. Choosing between options / design issues
4. Using the product / customer service

Through the consumer survey and focus groups it was found that almost all the barriers found in the existing studies are also true for younger older people. However, there was less concern about products or services sharing personal data (e.g. with health services) and privacy and control of monitoring services (please note that this may be due to the very low awareness of telehealth and telecare products generally amongst the people spoken to). Differences were also found in barriers that focussed on needs assessment and ways of paying for products or services through local authority funding; however this was not part of the COMODAL project which focuses on consumer experience, so was not specifically asked about.

The market analysis and the consumer survey highlighted the telehealth and telecare sector of the assisted living consumer market as being in its infancy and only 8% of people had purchased this type of equipment in our survey. Furthermore, none of the participants in the focus groups talked spontaneously about technology “services” that might be able to help them, indicating that the idea or promotion of a whole system solution rather than a single product has not yet reached consumers.

Information was found to be a key barrier to uptake. In the consumer survey, the top three barriers that were ranked as having the strongest influence for consumers in the 50-70 age group were: cost; knowing how to choose what to buy; and a lack of awareness that a product that might help exists.

Generally, all the enabling factors had a stronger influence than the barriers; an interesting approach to marketing that may be worth exploring by industry. The top three enablers were: believing that a product would really make a difference; a feeling that costs are affordable and worth it; and a belief that the product would make life safer at home.

Recognising that assistive technology can be of help (i.e. that it can bridge the gap between changing ability and the everyday activities that people want to do) is a key stage in the process of obtaining it and making successful use of it. As a general rule, people wanted to manage themselves and were open to ALTs supporting them to do so. However, one of the focus groups (the Prospective Consumers) did not see the relevance of ALT to their lives yet and could not imagine themselves using it. Importantly, most groups were open to purchasing ALTs as a private consumer; only one of our groups (Non-Purchasing Users) believed that the state should provide ALTs. This finding supports the scope and opportunity to develop the private consumer ALT marketplace.

A key finding for the research community is that there is a lack of high quality research regarding the effectiveness or otherwise of assisted living technologies. Whereas it is widely believed that such technologies can improve the lives of older people and provide better cost-effectiveness in terms of health and social care, this has yet to be established by research.

Linked to the need for more evidence of the impact of ALTs, a lack of awareness/information about ALTs was identified as the largest barrier to affecting the uptake and use of ALTs in previous research and this was still true for the COMODAL project. A strong theme evident in all stages of the research, including the industry workshop, the consumer survey and focus groups, was a lack of awareness of ALTs and the need for much more accessible and better information to empower people to make choices and decisions in terms of where to go to buy products and services and what to buy.

The market review uncovered inconsistencies in pricing and low levels of competition in traditional segments. The review categorised currently available products, identifying the main suppliers and summarising their approach to the market. Some parts of the market were clearly dominated by three suppliers. All the leading manufacturers sold their products to a wide range of outlets with wide price variations as a consequence, indicating that, for the consumer, it was well worth shopping around.
An area that clearly influenced what people chose to buy was the stigma associated with products and the design of products. The product review looked at trends in development and how well they meet the needs of consumers in their fifties and sixties. It showed that designers and product developers are only now beginning to recognise the market of younger older people as consumers or potential consumers and customers.

The review found that the market would be best served through better design of mainstream products, rather than specific items targeted at older people. It is clear that younger older people do not want to be stigmatised or singled out as in need of ‘assistive’ products or ‘equipment’. Where such products have been developed, they have tended to focus on the disability rather than the person who will use them, their wishes and aspirations and, unsurprisingly, this has made the products less attractive and desirable. Successful ageing has been defined as ‘growing old with good health, strength and vitality’. Psychological theories focus on ‘optimisation’ and the discovery of strengths that enhance quality of life. Well designed assistive technologies can assist in this process by providing the right equipment or environments that enable the person to continue living the life they have lived to date and also explore new activities and developments. Industry also supported the need for market-changing products and a focus on solutions and services, not just on technologies, alongside the need for better design of ALTs to make them more attractive, functional, discreet, simple and easy to use.

The industry workshop highlighted a poor definition and understanding of the needs of potential individual consumers and also of the potential and structure of the ALT marketplace. Interestingly, new ways of purchasing ALTs were suggested and preferred by consumer participants in the focus groups, even by those who only had experience of provision through health and social care services, which may be important for industry to take account of. These included opportunities for more hands-on experience through demonstrations and “try before you buy”, money back guarantees, rental options and lease hire. User confidence is also essential with reliability and good maintenance and servicing being key factors. It was suggested that consumers would be helped by hearing about other customers’ experiences, better information provision and advice about what to buy. A positive purchase/retail experience that offers outstanding customer service was also seen as desirable.

**Conclusion**

The research so far has demonstrated that, generally, people are not aware of ALT products and services that might help them. For those that are aware of ALT products and services, often they do not know where to go to buy them or how to choose the right product or service that best meets their needs.

It is proposed that there are three distinct populations within the ALT consumer market that consumer led business models need to consider:

1. People who have yet to buy or use ALT (prospective consumers) but who need to be informed
2. People who already buy ALTs either for themselves or for someone else they look after (consumers)
3. People who use ALTs but have not purchased them themselves (non purchasing user / consumers)

Our observations were that the consumer group who already buy ALTs acted as passionate champions for ALTs and really cared about everyone having access to and knowledge of the products and services. The non-purchasing user / consumers who use but do not buy ALTs displayed support for ALTs.

From data gathered in this part of the COMODAL project from industry, business and consumers, it is clear that EAT (including telehealth and telecare) is where the biggest gap in knowledge is present and a real opportunity exists to advance this relatively undeveloped sector of the consumer market.

As the population ages and those between 50-70 years old at the moment become the ‘new’ older generation, behaviours and demands will change, creating new market opportunities for innovation and adoption. It is interesting to think that whilst many more people will live longer, an equally large population may want and need ALT products and services to enable them to retain independence and a good quality of life. This research provides a valuable source of insight both for new and existing suppliers and retailers of ALT. It aims to provide insight and knowledge about consumer preferences of younger older people and the ALT market. It is believed that the evidence indicates an opportunity to open up and develop the market so that all consumers have access to and can benefit from assisted living solutions, thereby easing the challenges presented by the natural process of ageing.
Appendix One - About COMODAL

The aim of the COMODAL project is to support the development of a consumer market for assisted living technologies (ALTs) for younger older people (i.e. those people who are approaching retirement and older age in the 50 – 70 year age range).

The aim of the initial stage of the project was to develop a deep understanding of the needs of younger older people as both users and purchasers of ALTs and to investigate the barriers and enablers to ALT adoption for this group. This information will be used to design effective solutions to overcome these barriers and promote the factors that will enable the ALT market to flourish through the design of consumer led business models in later phases of the project.

The COMODAL project focuses on understanding the needs and behaviours of four segments of the younger older age group of people:

- Younger Older Personal Consumers: 50 to 70 year olds who purchase ALTs for their own use (i.e. those younger older people who buy and use the ALT)
- Younger Older Prospective Consumers: 50 to 70 year olds who neither buy nor use ALTs
- Younger Older Carer Consumers: 50 to 70 year olds ‘decision gatekeepers’ involved in the purchasing decision for other older ALT end users (i.e. those younger older people who buy but do not use ALTs)
- Younger Older Non purchasing Users/Consumer: 50 to 70 year olds who use ALTs but refer to ‘decision gatekeepers’ such as a family member, carer or advisor, to make the purchase decision (i.e. younger older people who use but do not buy the ALT)

Brief summary of the activities

The following activities were carried out within the first stage of this project (March 2011 to April 2012):

- A review of previous research to find out what was already known about the views, needs, purchasing behaviour and preferences of younger older consumers of assisted living products and services
- A market analysis to identify the assisted living products and services currently available on the market
- A product review to look at trends in development, types of products currently being developed, and how well they meet the needs of consumers in their fifties and sixties
- A street survey with 500 consumers to help understand the importance of the different barriers and enablers affecting the purchase and use of ALTs by younger older people
- Focus groups with four younger older consumer groups to gain a deeper understanding

and create a rich picture of attitudes towards the purchase and use of ALTs

- A workshop with industry partners to assess their views, understanding and experience of barriers and enablers to the use of their assisted living products and services for younger older people.

Web links to the full research reports for each of the activities will be available. Please refer to http://wwwm.coventry.ac.uk/hdti/Research/Pages/Comodal.aspx for further information on publication of the full research reports.

Next steps

The information gathered from this research will be used to design effective solutions to overcome barriers and promote the factors that will enable the ALT market to flourish through the design of consumer led business models.

(It should be noted that the COMODAL project does not consider telemedicine products which involve ‘delivering medical services and advice from one practitioner to another via a remote location’ within the AT scope or focus of a consumer led project.)

Whilst there is still knowledge to be gained from business models and approaches in the traditional community equipment market sector, it is recommended that the following work should focus on:

- Environmental Control Technologies and Services (low to high tech)
- Telehealth and Telecare Technologies and Services
- IT based devices and services used to support health and well being (e.g. health apps)

It is intended to carry out a series of creative activity workshops with consumers and industry partners to co-produce solutions and shape business approaches that are led by consumers to ensure the market will meet their needs in the future.

These creative activities will focus on three areas to emerge from work to date:

- Information needs including triggers for adoption
- Decision making including the influence of product design
- The purchase process

Ways of overcoming the stigma attached to the use of ALTs will be considered within each area to promote an ‘active approach to ageing’ and promote the idea of Assistive Technology as being ‘easier for everyone’.
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